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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/782,846

02/23/2004

Tsung-Te Lin

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RABIN & Berdo, PC
1101 14TH STREET, NW
SUITE 500
WASHINGTON, DC 20005

EXAMINER

HSIEH, SHIH WEN

ART UNIT

PAPER NUMBER

2861

DATE MAILED: 03/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No. 10/782,846	Applicant(s) LIN, TSUNG-TE	
	Examiner Shih-wen Hsieh	Art Unit 2861	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 10/200,945.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1-4-05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 10/200,945, filed on July 24, 2002. **Double Patenting**

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,733,107 ('107). Although the conflicting claims are not identical, they are not patentably distinct from each other because both cases deal with a service device disposed at both sides of a guiding bar, which guides a print head. The following is a table of comparison between these two claims to indicate their similarities:

<u>10/782,846</u>	<u>6,733,107</u>
<p>1. An inkjet printing module disposed in an inkjet printing apparatus, comprising: a guiding device extending from a first end to a second end thereof for supporting a print-head for moving therealong; a first servicing device neighboring to the first end for servicing the print-head; and a second servicing device neighboring to the second end for servicing the print-head; wherein the first servicing device services the print-head when the print-head moves to the first end, and the second servicing device services the print-head when the print-head moves to the second end.</p>	<p>1. An ink-jet printing module, positioned in an ink-jet printing mechanism, wherein the ink-jet printing module has a first side, a second side opposite to the first side, and a guiding bar between the first side and the second side, wherein the guiding bar has a first end coupled to the first side and a second end coupled to the second side, and wherein a print-head is movable along the guiding bar, the ink-jet printing module comprising: a cleaning device for cleaning the print-head, located at a bottom of the ink-jet printing module and adjacent to the first side; a covering device for covering the print-head, located at the bottom of the ink-jet printing module and adjacent to the second side; and a printing platform located at the bottom of the ink-jet printing module and between the cleaning device and the covering device.</p>

The inkjet printing module, the ink jet printing apparatus, guide device, first and second end, first and service devices disposed at the first and second ends respectively in the instant application are all obvious over those in patent ('107).

4. Claim 18 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,733,107 ('107). Although the conflicting claims are not identical, they are not patentably distinct from each other because both cases deal with a service device disposed at both sides

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of a guiding bar, which guides a print head. The following is a table of comparison between these two claims to indicate their similarities:

<u>10/782,846</u>	<u>6,733,107</u>
18. An inkjet printing apparatus, comprising: a print-head moving forwards and backwards in a printing direction; a first servicing device for servicing the print-head when the print-head moves forwards; and a second servicing device being spaced from the first servicing device, for servicing the print-head when the print-head moves backwards.	1. An ink-jet printing module, positioned in an ink-jet printing mechanism, wherein the ink-jet printing module has a first side, a second side opposite to the first side, and a guiding bar between the first side and the second side, wherein the guiding bar has a first end coupled to the first side and a second end coupled to the second side, and wherein a print-head is movable along the guiding bar, the ink-jet printing module comprising: a cleaning device for cleaning the print-head, located at a bottom of the ink-jet printing module and adjacent to the first side; a covering device for covering the print-head, located at the bottom of the ink-jet printing module and adjacent to the second side; and a printing platform located at the bottom of the ink-jet printing module and between the cleaning device and the covering-device.

Subject matters and limitation in claim 18 of the instant application are similar to those in claim 1 of the instant application. Instead, first and second ends in claim 1 of the instant application are replaced by forwards and backwards in this claim of the instant application.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 1-16 and 18-21 are rejected under 35 U.S.C. 102(a) as being anticipated by Magirl et al. (US Pat. No. 6,139,128).

In regard to:

Claim 1:

Magirl et al. teach:

An inkjet printing module disposed in an inkjet printing apparatus, comprising:

a guiding device (20, fig. 2) extending from a first end to a second end thereof for supporting a print-head (32 and 34, fig. 3) for moving therealong, refer to col. 2, lines 44-49;

a first servicing device (60) neighboring to the first end for servicing the print-head, refer to col. 3, lines 45-60; and

a second servicing device (62) neighboring to the second end for servicing the print-head, refer to col. 3, lines 45-60;

wherein the first servicing device services the print-head when the print-head moves to the first end, and the second servicing device services the print-head when the print-head moves to the second end, refer to col. 3, lines 45-60 and figs. 6. Note:

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Magirl et al.'s has two print head, i.e., 32 (black) and 34 (color). However, such two print heads can be just one single head, i.e., one portion of the ink nozzles are black, the rest of the nozzles are color. The structure of this type print head is well known in the art (please refer to references furnished in the conclusion section).

Claim 2:

Magirl et al. further teach:

wherein the guiding device is a guiding bar (20, fig. 3).

Claim 3:

Magirl et al. further teach:

wherein the first servicing device is a cleaning device for cleaning the print-head, refer to col. 45-60, the cleaning device taught by Magirl et al. is a wiper.

Claim 4:

Magirl et al. further teach:

wherein the cleaning device comprises a wiper (70 or 72), refer to col. 3, lines 49-60.

Claim 5:

Margirl et al. further teach:

wherein the cleaning device comprises an ink-absorbing device, refer to col. 4, lines 1-12.

Claim 6:

Magirl et al. further teach:

wherein the second servicing device is a covering device for covering the print head, refer to fig. 6 numeral (80), a cap, can be seen as the second service device, refer to col. 4, lines 1-3.

Claim 7:

The inkjet printing module according to claim 6, wherein the covering device comprises a cap.

Rejection:

This claim is rejected on the basis as set forth for claim 6 discussed above.

Claim 8:

Magirl et al. further teach:

A printing platform between the first servicing device and the second servicing device. Note: although Magirl et al. do not specifically teach a platform between the first servicing device and the second servicing device, however, such a platform or generally called a platen is an inherent element in an ink jet printer. This platform or platen is used to support the print media.

Claim 9:

Magirl et al. further teach:

wherein the first servicing device is disposed at a bottom of the inkjet printing module, refer to fig. 6 for the physical position of the service devices.

Claim 10:

The inkjet printing module according to claim 1, wherein the second servicing device is disposed at a bottom of the inkjet printing module.

Rejection:

This claim is rejected on the basis as set forth for claim 9 discussed above.

Claim 11:

A method for servicing a print head of an inkjet printing module, wherein the inkjet printing module has a guiding device extending from a first end to a second end thereof for supporting the print-head, the method comprising steps of:

servicing the print head when the print head moves to the first end; and
servicing the print-head when the print-head moves to the second end.

Rejection:

This claim corresponds to claim 1, and the steps in the method claim are deemed to be made inherent by the functions of the structure in the combination as discussed above and is rejected on the basis as set forth for claim 1 discussed above.

Claim 12:

The servicing method according to claim 11, wherein the step of servicing at the first end is cleaning the print-head.

Rejection:

This claim corresponds to claim 3, and the step in the method claim is deemed to be made inherent by the functions of the structure in the combination as discussed above and is rejected on the basis as set forth for claim 3 discussed above.

Claim 13:

The servicing method according to claim 11, wherein the step of servicing at the second end is covering the print-head.

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Rejection:

This claim corresponds to claim 6, and the step in the method claim is deemed to be made inherent by the functions of the structure in the combination as discussed above and is rejected on the basis as set forth for claim 6 discussed above.

Claim 14:

The servicing method according to claim 11, the method further comprising one step of moving the print head to the first end before the step of servicing at the first end.

Rejection:

This claim corresponds to claim 1, and the step in the method claim is deemed to be made inherent by the functions of the structure in the combination as discussed above and is rejected on the basis as set forth for claim 1 discussed above. Also refer to col. 3, lines 52-57.

Claim 15:

The servicing method according to claim 11, the method further comprising one step of moving the print-head to the second end before the step of servicing at the second end.

Rejection:

This claim corresponds to claim 1, and the step in the method claim is deemed to be made inherent by the functions of the structure in the combination as discussed above and is rejected on the basis as set forth for claims 1 and 14 discussed above. Also refer to col. 3, lines 52-57.

Claim 16:

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Magirl et al. further teach:

the method further comprising one step of printing by moving the print-head backward and forward along the guiding device, refer to col. 2, lines 44-49.

Claim 18:

An inkjet printing apparatus, comprising:

a print-head moving forwards and backwards in a printing direction;

a first servicing device for servicing the print-head when the print-head moves forwards; and

a second servicing device being spaced from the first servicing device, for servicing the print-head when the print-head moves backwards.

Rejection:

This claim is rejected on the basis as set forth for claim 1 discussed above.

Claim 19:

The inkjet printing apparatus according to claim 18, wherein the first servicing device is a cleaning device for cleaning the print-head.

Rejection:

This claim is rejected on the basis as set forth for claims 3 and 12 discussed above.

Claim 20:

The inkjet printing apparatus according to claim 18, wherein the second servicing device is a covering device for covering the print-head.

Rejection:

This claim is rejected on the basis as set forth for claims 6 and 13 discussed above.

Claim 21:

The inkjet printing apparatus according to claim 18, wherein the printing direction has a first end and a second end opposite to the first end, the first servicing device is disposed neighboring to the first end and the second servicing device is disposed neighboring to the second end.

Rejection:

This claim is rejected on the basis as set forth for claim 1 discussed above.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Magirl et al. in view of Kobayashi et al. (US Pat. No. 6,036,299).

The device of Magirl et al. DIFFERS from claim 17 in that it does not teach:

wherein the step of servicing at the first end is performed both before and after the step of printing.

Kobayashi et al. teach in their fig. 3 an overall operation of an ink jet printer, the scheme in fig. 3 teaches step S103 a cleaning process before a printing operation at step S107, and a cleaning processing at step S 109 after the printing operation, refer to col. 5, lines 1-28.

Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the device of Magirl et al. to include the control scheme as taught by Kobayashi et al. for the purpose of assuring a cleaning print head before a printing operation is started.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 5,504,508, "Ink receiving cap, and ink-jet recording apparatus and ink discharging method using the same" issued to Hashimoto, 4/96 teaches in his fig. 1 a color print head, which has color nozzles (110Y, 110M and 110C) and black nozzles (110K).

US 5,835,109, "Ink jet apparatus with collectively capped multicolor ink discharge openings" issued to Uchida, 11/98 teaches in his fig. 2 a print head having color nozzles (2Y, 2C and 2M) and black nozzles (2K).


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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shih-wen Hsieh whose telephone number is 571-272-2256. The examiner can normally be reached on 7:30AM -5:00PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, S D. Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SHIH-WEN HSIEH
PRIMARY EXAMINER


Shih-wen Hsieh
Primary Examiner
Art Unit 2861

SWH


March 17, 2005